GRANGER

Testimony to the House Energy and Technology Committee In Support of House Bill 4265 and 4266 By Granger

Keith L. Granger, Chief Executive Officer

Chairman Horn, committee members, thank you for the opportunity to share with you our reasons for supporting House Bills 4265 and 4266, which would provide an exemption for the existing yard waste landfill ban in order to increase renewable energy production.

I would like to begin by providing a brief background of Granger.

Granger is a third generation, family-owned, Lansing-based business. Our 200 associates provide waste hauling services and operate two landfills, a recycling center, and a compost facility.

In 1985, Granger was the first in Michigan to develop and implement a commercial scale landfill gas project. Since that time, we have built seven landfill gas utilization projects in Michigan, generating nearly 30 megawatts of renewable energy, and developed seven additional landfill gas projects in five other states. This allows us to create highly skilled jobs.

Our energy division is growing and our customers are demanding more renewable energy to meet their portfolio standard requirements. We know that the quality and quantity of landfill gas is directly related to the organic content of the waste stream. We know we can effectively harvest this gas and use it to make energy. This is why we seek approval of House Bills 4265 and 4266 to increase renewable energy production from landfill gas in Michigan.

Ralph Nuerenberg, Chief Operating Officer, Waste Services

Chairman Horn, members of the committee, I would like to provide a basic review of the benefits of House Bills 4265 and 4266.

Landfill gas, which is about 50 percent methane, forms from the decomposition of waste in landfills. A well field constructed of a perforated pipe collection system, applies a vacuum to the landfill to capture the gas. The movement of the gas in the landfill is managed by the vacuum applied and other factors, such as the design of cover systems to promote soil oxidation. This process results in the harvesting of the gas for a beneficial energy, and as a control measure for emissions. A landfill gas-to-energy process is depicted in the diagram that has been distributed to you.

Today, forward-thinking companies like ours capture the methane to produce energy by installing collection piping as each portion of the landfill is built–before trash is added. The

installation of the infrastructure for gas capture continues as the layers of trash are put in place.

The purpose of House Bills 4265 and 4266 is to create **MORE** renewable energy from yard waste. Yard waste, defined as leaves, grass, and tree trimmings, has a high level of organic content which will produce landfill gas.

House Bills 4265 and 4266, as introduced, would permit a landfill to be designated by its operating license as a landfill energy production facility, allowing yard clippings to be disposed of in landfill cells served by a gas collection system for the purpose of furthering energy production.

To accomplish the energy outcomes that would result from this change to existing law, the following key considerations are included in the legislation:

- These bills request an exemption, NOT a repeal of the existing yard waste ban.

- This policy change would provide communities, individuals, and landfills a choice for managing yard waste materials by producing either a soil amendment through composting, or power through landfill gas recovery.

- The purpose is to provide meaningful energy results. Therefore, the language provides specific criteria for the exemption. This also raises the bar for management of landfills. A participating landfill would be required to have the following:
  - An operable gas collection system in place before yard waste can be accepted
  - A minimum 70 percent gas collection system efficiency
  - A productive end use, demonstrated by annual reporting, which also serves as an accountability measure.

Why should a policy change be considered? There have been important technological advances in landfill construction and operation since the yard waste ban was adopted in 1995. These facilities are highly engineered and designed to serve the purpose of being a safe repository for trash. While meeting this purpose, we know these facilities can also be a greater resource, employing full-time, highly skilled positions vs. part-time, seasonal employment.

To validate our position, we commissioned the report *Examining Increased Renewable Energy Production from Landfill Gas in Michigan.* The report was prepared by Public Sector Consultants with technical support from the engineering consulting firm, NTH.

In the report we asked if an exemption to the existing yard waste ban would increase renewable energy production from landfill gas in Michigan. The findings of the study show that an exemption for yard waste **will** yield **more** energy production.

Conducted in 2007, the report identified 49 municipal solid waste landfills in Michigan, of which at least 20 had operational landfill gas projects. (Since 2007, the number of operational landfill gas projects has increased to 27.) The report demonstrated that Michigan landfills could produce nearly 400 megawatts of renewable energy if all qualified projects were fully developed and an exemption for yard waste is allowed. This is approximately equivalent to the output of a medium-sized power plant.

The benefits of landfill gas projects are real. According to the Environmental Protection Agency (EPA), for every three megawatts generated, enough energy is produced to power 1,900 average-sized homes. Additionally, landfill gas is considered base load power, which is available 24 hours a day, seven days a week, 365 days a year. Energy from landfill gas can continue to be harvested for 20 to 30 years or longer after the landfill closes.

There is consensus that landfills should capture methane to produce energy. There is also consensus that state-of-the-art technology can be used to capture the energy potential from yard waste. This is what House Bills 4265 and 4266 are proposing.

Approval of the bills allows public input and valuation of existing programs as measures to use yard waste as a means to responsibly meet our increasing renewable energy needs. Approval, without question, will result in more renewable energy, decreased emissions, and a choice for management of yard waste.